

## REMARKS

Applicant will address each of the Examiner's objections and rejections in the order in which they appear in the Final Rejection. As a RCE is being filed herewith, this amendment should be entered and considered at this time.

### Claim Objection

In the Office Action, the Examiner objects to Claims 24, 29, 34, 39, 44 and 49 for an informality and in particular, for allegedly lacking an antecedent basis for "the second impurity region."

While Applicant disagrees with this objection, in order to advance the prosecution of this application, Applicant is amending Claims 24, 25, 29, 30, 34, 35, 39, 44 and 49 to recite "the at least two second impurity regions." It is respectfully submitted that this overcomes the Examiner's objection.

The Examiner also objects to the phrase "wherein the second impurity has a striped shape" in Claims 25, 30, and 35. Applicant has amended these claims in accordance with the Examiner's suggestion.

Accordingly, it is respectfully submitted that the Examiner's objections have been overcome, and it is requested that the objections be withdrawn.

### Claim Rejections - 35 USC §112

The Examiner also rejects Claims 45 and 50 under 35 USC §112, second paragraph, as being indefinite. This rejection is also respectfully traversed.

While Applicant traverses this rejection, in order to advance the prosecution of this application, these claims have been canceled, rendering this rejection moot.

### Claim Rejections - 35 USC §103

#### Claims 24, 25, 28, 39, 41 and 43

The Examiner also rejects Claims 24, 25, 28, 39, 41 and 43 under 35 USC 103(a) as being unpatentable over Zaleski (US 5,455,791 - a new reference) together with Yamazaki et al. (US 6,127,702). This rejection is also respectfully traversed.

Independent Claim 24 recites that the claimed semiconductor device comprises at least two second impurity regions formed in said semiconductor film between the pair of first impurity regions, at least one channel region between the at least two second impurity regions, boundaries between the channel region and the at least two second impurity regions extend in a direction along a carrier flow direction of the channel region, and wherein the floating gate overlaps a boundary between at least one of the pair of the first impurity regions and the at least two second impurity regions.

The Examiner admits that Zaleski does not disclose these claimed features. The Examiner, however, cites Yamazaki and contends that it discloses a thin film transistor with at least two such impurity regions. The Examiner then concludes that it would have been obvious to provide Zaleski's thin film transistor with at least two such second impurity regions as taught by Yamazaki which would then result in the claimed structure. Applicant respectfully disagrees.

As the Examiner admits, Zaleski does not disclose or suggest the above claimed features. Instead, at most, Zaleski discloses that the floating gate 6 overlaps a boundary between one of the pair of first impurity regions 4a and the channel region 4c. Further, Yamazaki does not appear to disclose the claimed feature of the floating gate overlapping a boundary between at least one of the pair of the first impurity regions and the at least two second impurity regions, and no showing has been made in the Office Action as to where this feature is allegedly disclosed in Yamazaki. Instead, the Examiner vaguely cites the "entire patent, including Fig.

1A's impurity region 104" in Yamazaki. Applicant, however, cannot find the claimed feature in Fig. 1A in Yamazaki. With regard to the entire patent, Applicant also cannot find the claimed feature. Applicant notes, for example, that Fig. 18A in Yamazaki appears to show that the gate electrode 1816 does not overlap impurity region 1815 or channel region 1811.

Accordingly, for at least the above-stated reasons, it is respectfully submitted that even if the cited references are properly combined (which Applicant does not admit), the combination still does not disclose or suggest the device recited in independent Claim 24. Hence, Claim 24 and those claims dependent thereon are patentable over the cited references.

For similar reasons, independent Claim 39 and those claims dependent thereon are also not disclosed or suggested by the cited references but are patentable thereover.

Accordingly, it is respectfully requested that this rejection be withdrawn.

#### Claims 29, 30, 33, 34, 35, 38, 44, 46, 48, 49, 51 and 53

The Examiner also rejects Claims 29, 30, 33, 34, 35, 38, 44, 46, 48, 49, 51 and 53 under 35 USC §103(a) as being unpatentable over Zaleski et al. together with Yamazaki et al. and Liu (US 5,814,854). This rejection is also respectfully traversed.

For similar reasons to those discussed above, independent Claims 29, 34, 44 and 49 and those claims dependent thereon are also not disclosed or suggested by the cited references but are patentable thereover.

Accordingly, it is respectfully requested that this rejection be withdrawn.

#### New Claims

Applicant is also adding new Claims 54-59 herewith. As each of these is a dependent claim, for at least the reasons discussed above for the independent claims, these claims are also

allowable over the cited references. Accordingly, it is respectfully requested that these new claims be entered and allowed.

If any fee is due for these new claims, please charge our deposit account 50-1039.

#### Information Disclosure Statement

Applicant is also enclosing herewith an information disclosure statement (IDS). It is respectfully requested that this IDS be entered and considered prior to the issuance of any further action for this application. As a RCE is being filed herewith, no fee is believed due for this IDS. If a fee is due, please charge our deposit account 50/1039.

#### Conclusion

Accordingly, it is respectfully submitted that the present application is in a condition for allowance and should be allowed.

If any further fee is due for this amendment, please charge our deposit account 50/1039.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,



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